

WHAT IS CLAIMED IS:

1. A sheet accumulation processing device which comprises:

- 5 a sheet holding means for protruding forward to a front of a housing from a sheet bunch holding condition in the housing and then releasing a sheet bunch to place said sheet bunch onto a sheet accumulating tray; and
- an opening shielding device disposed in an opening
10 formed in a housing front face via which said sheet holding means is protruded for changing from a closed condition to an opened condition dependent on the protruding operation of a sheet holding section and subsequently from the opened condition to the closed condition when said sheet holding
15 section is retreated into said opening, so that said sheet holding section can be protruded and retreated via said housing front face.

2. The sheet accumulation processing device
20 according to claim 1 wherein said opening shielding device comprises a suspension plate suspended from a support of an upper end disposed in an upper portion of said opening, and an elevating plate liftably disposed in a lower portion of said opening, and

25 the suspension plate and the elevating plate open or close said opening shielding device dependent on said protruding operation or the retreating operation of said sheet holding section.

30 3. The sheet accumulation processing device according to claim 2 wherein said elevating plate is usually pulled upward by one or plural elastic members, pushed downward to open accompanying said protruding operation of

said sheet holding means and closed by the retreating operation of said sheet holding means.

4. A sheet accumulation processing device which
5 comprises:

a sheet holding means for receiving an end of a sheet bunch sent via one end of a slit opening formed in a housing front face in a predetermined receiving position, moving along the opening with the sheet bunch held therein
10 and discharging said sheet bunch onto a sheet accumulating tray disposed in front of a housing in a predetermined discharge position in said slit opening,

a sheet holding section of said holding means being constituted to protrude forward to a front of said housing
15 front face from a sheet bunch holding condition in said discharge position and then release the holding of said sheet bunch to place said sheet bunch onto said sheet accumulating tray; and

an opening shielding device disposed in said slit
20 opening in said discharge position for changing from a closed condition to an opened condition dependent on the protruding operation of said sheet holding section and subsequently from the opened condition to the closed condition when said sheet holding section is retreated into said slit opening, so that
25 said sheet holding section can be protruded and retreated via said housing front face.

5. The sheet accumulation processing device according to claim 4 wherein said opening shielding device
30 comprises a suspension plate suspended from a support of an upper end disposed in an upper portion of said slit opening, and an elevating plate liftably disposed in a lower portion of said slit opening, and

the suspension plate and the elevating plate are constituted in such a manner that said opening shielding device is opened or closed dependent on said protruding operation or the retreating operation of said sheet holding
5 section.

6. The sheet accumulation processing device according to claim 5 wherein said elevating plate is usually pulled upward by one or plural elastic members, pushed
10 downward to open accompanying said protruding operation of said sheet holding means and closed by the retreating operation of said sheet holding means.

7. The sheet accumulation processing device
15 according to claim 5 wherein said slit opening is provided with a shielding plate which opens said slit opening when at least the end of said sent sheet bunch passes in said slit opening until said sheet holding means discharges the sheet bunch onto said sheet accumulating tray, and shields said
20 slit opening in other cases.

8. The sheet accumulation processing device according to claim 7 wherein an opening/closing operation of said slit opening is performed by an opened position detector
25 attached to the shielding plate for detecting an opened position of the shielding plate, a closed position detector for detecting a closed position of the shielding plate and a drive device for opening and closing said shielding plate based on detection results of said opened position detector
30 and said closed position detector.

9. The sheet accumulation processing device according to claim 1 wherein in said protruding operation of

said sheet holding means, said sheet holding means is rotated forward and downward via said housing front face from the condition of holding said sheet bunch inside said housing front face.

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10. A sheet accumulation processing device which comprises:

a sheet holding means for receiving a sheet conveyed from one side face of the device, holding and transferring
10 the sheet to the other side face and protruding and placing said sheet onto an accumulating tray disposed in front of the device;

an opening formed in a device face for the transferring and placing operation of said sheet by the sheet
15 holding means;

said opening being constituted of a horizontal opening formed in a device front face for passing an end of said sheet and a vertical opening adjacent to the horizontal opening for said placing operation to the front of the device
20 by said holding means,

said horizontal opening being closed when said holding means is on standby and opened at the time of the transferring and placing of the sheet; and

a vertical opening means for opening or closing said
25 vertical opening, the vertical opening means being constituted to inhibit said vertical opening from opening at least when said holding means is on standby.

11. The sheet accumulation processing device
30 according to claim 10 wherein said vertical opening means comprises an upper rotating shutter means and a lower elevating shutter means, the rotating shutter means is rotatably suspended from a support of an upper end, and the

elevating shutter means is lowered to open when said holding means performs the placing operation of the sheet.

12. The sheet accumulation processing device
5 according to claim 11 wherein said rotating shutter means is inhibited from rotating when said horizontal opening is closed and allowed to rotate to the front face of the device at the time of said placing operation by said sheet holding means.

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13. The sheet accumulation processing device
according to claim 11 wherein said rotating shutter means is locked until said holding means moves to said vertical opening.

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14. The sheet accumulation processing device
according to claim 11 wherein said horizontal opening is opened when a panel member disposed on the front face of the device is raised and closed when the panel member is lowered.

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15. The sheet accumulation processing device
according to claim 14 wherein said rotating shutter means has a locking mechanism which is constituted to inhibit the rotation when said panel member is in a lowered position and
25 allow said rotation when the panel member is raised.

16. The sheet accumulation processing device
according to claim 10 wherein said elevating shutter means is raised or lowered as an interaction of the movement of said
30 sheet holding means.

17. The sheet accumulation processing device
according to claim 16 wherein said interaction is constituted

in such a manner that when said sheet holding means moves from one side face of the device to the other side face and a portion of the sheet holding means operates a lever means disposed on a movement track, said elevating shutter means is
5 raised, and when the sheet holding means returns to its original position, by resetting the operation of the lever means, the elevating shutter means is lowered.